



## Napa River Flood Protection Project

### Full Mitigation Best Practice Story

#### *Napa County, California*

**Napa, CA** - In the flood-prone valley of the Napa River lies the world-class traveler's destination of Napa, California. Over the span of 36 years (1961-1997), a total of 19 floods caused more than \$542 million in residential property damage alone. That total does not include economic losses in the tourism industry, environmental damage, or the loss of human lives.



During a 1986 flood, 20 inches of rain fell in a 48-hour period, resulting in 3 deaths, the destruction of 250 homes, damage to 2,500 homes, and the evacuation of 5,000 residents. Flood events in March 1995 and January 1997 were similarly destructive. The City of Napa subsequently embarked on an ambitious effort to mitigate flood losses in the community.

The Napa River - Napa Creek Flood Protection Project was voted into reality by the passage of Napa County Measure A in March 1998. This half-cent local sales tax levy passed by the citizens of Napa County provided a funding mechanism for the local share of the project cost and helped solidify the partnership between the Napa County Flood Control and Water Conservation District (NCFCWCD) and the U.S. Army Corps of Engineers.

Measure A funds flood protection, drainage improvements, dam safety, and watershed management projects for each community in Napa County and in the unincorporated area of the county. The project is still on-going in 2006 and components include the following: the acquisition and removal of more than 50 mobile homes, 16 residences, and 28 commercial buildings from flood-prone areas; the creation of over 400 acres of emergent marsh and 150 acres of seasonal wetlands; the removal, reconstruction, and elevation of several bridges; the elevation of railroad tracks; home and utilities elevations; the creation of structural flood control elements such as widened stream beds, flood walls, levees, and culverts; and the construction of three detention basins with accompanying pump stations. According to NCFCWCD, "When all these project components are in place, the City of Napa will have a system to keep homes and businesses dry in the future."

December 2005 was the first test of Napa County's new flood mitigation efforts when nearly 10 inches fell in a 24-hour period. Local officials were ready for the flood and had already placed sandbags and warned residents. Within four days of the flood the City had placed debris containers around town which greatly facilitated cleanup and repair.

At the time of the December 2005 floods, officials estimated that the project was only 40% completed. Nevertheless, significant economic losses were avoided. A sense of confidence in the economic vitality of the City of Napa is evidenced by an all-time high in construction activity for both the residential and commercial sectors, the opening of four new downtown restaurants, the proposal for three new hotels, and an increase in commercial assessment in the downtown area.

In addition to mitigating flood losses, the community has placed a revitalized, healthy river as the centerpiece of Napa. Many people now take advantage of the resources the river has to offer, including fishing, boating, walking along river trails, bird watching, and scenic dining.

For up-to-date information on flood mitigation activities in Napa County, please visit the <http://www.napaflooddistrict.org/> Napa County Flood Control and Water Conservation District website.

### Activity/Project Location

Geographical Area: **Single County (County-wide)**

FEMA Region: **Region IX**

State: **California**

County: **Napa County**

### Key Activity/Project Information

Sector: **Public/Private Partnership**

Hazard Type: **Flooding**

Activity/Project Type: **Acquisition/Buyouts; Flood Control; Wetland Restoration**

Activity/Project Start Date: **03/1998**

Activity/Project End Date: **Ongoing**

Funding Source: **Flood Mitigation Assistance (FMA); Hazard Mitigation Grant Program (HMGP); Mitigation Planning; National Flood Insurance Program (NFIP); State sources; Other Federal Agencies (OFA); Other FEMA funds/ US Department of Homeland Security; Property Owner, Commercial; Property Owner, Residential; U.S. Small Business Administration (SBA)**

Funding Recipient: **Local Government**

Funding Recipient Name: **Napa County Flood Control and Water Conservation District**

Application/Project Number: **9999**

### Activity/Project Economic Analysis

Cost: **\$18,940,392.00 (Actual)**

### Activity/Project Disaster Information

Mitigation Resulted From Federal  
Disaster? **Yes**

Federal Disaster #: **1046 , 03/12/1995**

Federal Disaster Year: **1995**

Value Tested By Disaster? **Yes**

Tested By Federal Disaster #: **No Federal Disaster specified**

Year First Tested: **2005**

Repetitive Loss Property? **Yes**

## Reference URLs

Reference URL 1: <http://www.napaflooddistrict.org>

Reference URL 2: <http://www.cityofnapa.org>

## Main Points

- Over the span of 36 years (1961-1997), a total off 19 floods have caused more than \$542 million in residential property damage.
- The Napa River – Napa Creek Flood Protection Project was voted into effect in March 1998.
- Measure A, a half-cent local sales tax levy passed by the citizens of Napa County, provided a funding mechanism for the local share of the project cost
- December 2005 was the first test for Napa County's new mitigation efforts when nearly 10 inches fell in a 24 hour period.
- At the time of the December 2005 floods, officials estimate that the project was only 40% completed. However, significant losses were avoided.



Aerial view of bridge during flood.



Sandbags await next flood in Napa.



Arroyo Drive in Napa.